

Proposed Claim for U.S. Patent Application No. 10/003,283

A resin molding device for molding a resin molded product by injecting a molten resin into a cavity of a metal mold followed by solidification, which device comprises:

a metal mold with a cavity, the cavity having at least first, second, and third walls, said first, second and third walls forming a stepped part orthogonal to the flowing direction of said molten resin injected into the cavity, said first wall forming a narrow part of said cavity, said third wall forming a thicker part of said cavity; and

an outside air inlet part formed in said third wall, said outside air inlet part configured to allow the outside of said metal mold to communicate with the thicker part of said cavity to form a sink in said resin molded product that cools slower than the rest of the resin molded product, an opening of said outside air inlet part located in a portion of said cavity other than a transfer face of the cavity.